



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/715,729 Confirmation No.: Unassigned  
Applicant: Sommadossi *et al.*  
Filed: November 17, 2003  
TC/A.AU.: Unassigned  
Examiner: Unassigned  
  
Docket No.: 06171.105062 IDX 1023  
Customer No.: 20786  
Title: 2'-Branched Nucleosides and Flaviviridae Mutation

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

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The citation of information on the attached Form PTO-1449 is made pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98. Copies of all references are enclosed. The citation of this information does not constitute an admission of priority or that any cited item is available as a reference, or a waiver of any right the applicant may have under applicable statutes, Rules of Practice in patent cases, or otherwise.

Because this Information Disclosure Statement is being submitted before the mailing of a first Office action on the merits, the Applicants do not believe that any additional fees are due; however, the Commissioner is hereby authorized to charge any fees due or credit any overpayment to Deposit Account No. 11-0980.

Respectfully submitted,

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Sheet **1** of **11****Complete if Known**

|                        |                          |
|------------------------|--------------------------|
| Application Number     | 10/715,729               |
| Filing Date            | November 17, 2003        |
| First Named Inventor   | Sommadossi <i>et al.</i> |
| Group Art Unit         | Unassigned               |
| Examiner Name          | Unassigned               |
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**U.S. PATENT DOCUMENTS**


| Examiner<br>Initials * | Cite<br>No. <sup>1</sup> | U.S. Patent Document |                                      | Name of Patentee or Applicant of<br>Cited Document | Date of Publication<br>of Cited Document<br>MM-DD-YYYY | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear |
|------------------------|--------------------------|----------------------|--------------------------------------|--|--|---|
|                        |                          | Number               | Kind Code <sup>2</sup><br>(if known) |  |  |   |
|                        | AA                       | 3,798,209            | A                                    | Witkowski, <i>et al.</i>                           | 03-19-1974   |   |
|                        | AB                       | RE29,835             |                                      | Witkowski <i>et al.</i>                            | 11-14-1978   |   |
|                        | AC                       | 4,522,811            | A                                    | Eppstein <i>et al.</i>                             | 06-11-1985   |   |
|                        | AD                       | 4,957,924            | A                                    | Beauchamp  | 09-18-1990   |   |
|                        | AE                       | 5,149,794            | A                                    | Yatvin <i>et al.</i>                               | 09-22-1992   |   |
|                        | AF                       | 5,157,027            | A                                    | Biller <i>et al.</i>                               | 10-20-1992   |   |
|                        | AG                       | 5,194,654            | A                                    | Hostetler <i>et al.</i>                            | 03-16-1993   |   |
|                        | AH                       | 5,223,263            | A                                    | Hostetler <i>et al.</i>                            | 06-29-1993   |   |
|                        | AI                       | 5,256,641            | A                                    | Yatvin <i>et al.</i>                               | 10-26-1993   |   |
|                        | AJ                       | 5,372,808            | A                                    | Blatt <i>et al.</i>                                | 12-13-1994   |   |
|                        | AK                       | 5,411,947            | A                                    | Hostetler <i>et al.</i>                            | 05-02-1995   |   |
|                        | AL                       | 5,463,092            | A                                    | Hostetler <i>et al.</i>                            | 10-31-1995   |   |
|                        | AM                       | 5,543,389            | A                                    | Yatvin <i>et al.</i>                               | 08-06-1996   |   |
|                        | AN                       | 5,543,390            | A                                    | Yatvin <i>et al.</i>                               | 08-06-1996   |   |
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|                        | AP                       | 5,554,728            | A                                    | Basava <i>et al.</i>                               | 09-10-1996   |   |
|                        | AQ                       | 5,676,942            | A                                    | Testa <i>et al.</i>                                | 10-14-1997   |   |
|                        | AR                       | 5,738,845            | A                                    | Imakawa  | 04-14-1998   |   |
|                        | AS                       | 5,830,455            | A                                    | Valtuna <i>et al.</i>                              | 11-03-1998   |   |
|                        | AT                       | 5,849,696            | A                                    | Chretien <i>et al.</i>                             | 12-15-1998   |   |
|                        | AU                       | 5,908,621            | A                                    | Glue <i>et al.</i>                                 | 06-01-1999   |   |
|                        | AV                       | 5,928,636            | A                                    | Alber <i>et al.</i>                                | 07-27-1999   |   |
|                        | AW                       | 5,942,223            | A                                    | Bazer <i>et al.</i>                                | 08-24-1999   |   |
|                        | AX                       | 5,977,061            | A                                    | Holy <i>et al.</i>                                 | 11-02-1999   |   |
|                        | AY                       | 5,980,884            | A                                    | Blatt <i>et al.</i>                                | 11-09-1999   |   |
|                        | AZ                       | 6,312,662            |                                      | Erion <i>et al.</i>                                | 11-06-2001   |   |
|                        | AAA                      | 6,340,690            | B1                                   | Bachand <i>et al.</i>                              | 01-22-2002   |   |
|                        | AAB                      | 6,395,716            | B1                                   | Gosselin <i>et al.</i> (Novirio / Idenix)          | 05-28-2002   |   |
|                        | AAC                      | 6,444,652            | B1                                   | Gosselin <i>et al.</i> (Novirio / Idenix)          | 09-03-2002   |   |
|                        | AAD                      | 2002/0147160         | A1                                   | Bhat <i>et al.</i>                                 | 10-10-2002   |   |
|                        | AAE                      | 2003/0008841         | A1                                   | Devos <i>et al.</i>                                | 01-09-2003   |   |
|                        | AAF                      | 2003/0028013         | A1                                   | Wang <i>et al.</i>                                 | 02-06-2003   |   |

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Sheet **2** of **11****Complete if Known**

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| Examiner Name          | Unassigned               |
| Attorney Docket Number | 06171.105062 IDX 1023    |

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|                        |                          | Number               | Kind Code <sup>2</sup><br>(if known) |  |  |   |
|                        | BA                       | 2003/0050229         | A1                                   | Sommadossi <i>et al.</i>                           | 03-13-2003   |   |
|                        | BB                       | 2003/0060400         | A1                                   | LaColla <i>et al.</i>                              | 03-27-2003   |   |
|                        | BC                       | 2003/0083307         | A1                                   | Devos <i>et al.</i>                                | 05-01-2003   |   |

**FOREIGN PATENT DOCUMENTS**


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|                        |                          | Office <sup>3</sup>     | Number    | Kind Code <sup>2</sup><br>(if known) |  |  |   |                |
|                        | BD                       | DE                      | 3,512,781 | A1                                   | Soc. Nat. Elf Aquitaine                            | 10-17-1985   |   |                |
|                        | BE                       | EP                      | 0,180,276 | B1                                   | Stamincarbone B.V.                                 | 12-28-1988   |   |                |
|                        | BF                       | EP                      | 0,350,287 | B1                                   | Chimerix, Inc.                                     | 09-27-2000   |   |                |
|                        | BG                       | EP                      | 0,650,371 | B1                                   | State of Oregon                                    | 11-15-2000   |   |                |
|                        | BH                       | FR                      | 1,521,076 | A                                    | Merck & Co. Inc.                                   | 04-12-1968   |   |                |
|                        | BI                       | FR                      | 2,662,165 | A                                    | Univ. Paris Curie                                  | 11-22-1991   |   |                |
|                        | BJ                       | GB                      | 1,163,103 | A                                    | Merck & Co. Inc.                                   | 09-04-1969   |   |                |
|                        | BK                       | GB                      | 1,209,654 | A                                    | Merck & Co. Inc.                                   | 10-21-1970   |   |                |
|                        | BL                       | WO                      | 89/02733  | A1                                   | Univ. of California                                | 04-06-1989   |   |                |
|                        | BM                       | WO                      | 90/00555  | A1                                   | Vical Inc.   | 01-25-1990   |   |                |
|                        | BN                       | WO                      | 91/16920  | A1                                   | Vical Inc.   | 11-14-1991   |   |                |
|                        | BO                       | WO                      | 91/18914  | A1                                   | Vical Inc.   | 12-12-1991   |   |                |
|                        | BP                       | WO                      | 91/19721  | A1                                   | Glazier  | 12-26-1991   |   |                |
|                        | BQ                       | WO                      | 93/00910  | A1                                   | Vical Inc.   | 01-21-1993   |   |                |
|                        | BR                       | WO                      | 94/26273  | A1                                   | Hostetler  | 11-24-1994   |   |                |
|                        | BS                       | WO                      | 96/15132  | A1                                   | Univ. of California                                | 05-23-1996   |   |                |
|                        | BT                       | WO                      | 99/15194  | A1                                   | Schering Corporation                               | 04-01-1999   |   |                |
|                        | BU                       | WO                      | 99/43691  | A1                                   | Emory U.; U.Ga.R.F.                                | 02-09-1999   |   |                |
|                        | BV                       | WO                      | 99/45016  | A2                                   | Metabasis Therapeutics.                            | 09-10-1999   |   |                |
|                        | BW                       | WO                      | 99/59621  | A1                                   | Schering Corporation                               | 11-25-1999   |   |                |
|                        | BX                       | WO                      | 99/64016  | A1                                   | Hoffman-La Roche AG                                | 12-16-1999   |   |                |
|                        | BY                       | WO                      | 00/09531  | A2                                   | Novirio (Idenix); CNRS                             | 02-24-2000   |   |                |
|                        | BZ                       | WO                      | 00/24355  | A1                                   | Smith & Nephew Kinetic                             | 05-04-2000   |   |                |
|                        | BAA                      | WO                      | 00/37110  | A2&3                                 | Schering Corporation                               | 06-29-2000   |   |                |
|                        | BAB                      | WO                      | 00/52015  | A2                                   | Metabasis Therapeutics                             | 09-08-2000   |   |                |

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Sheet **3** of **11****Complete if Known**

|                        |                          |
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| Group Art Unit         | Unassigned               |
| Examiner Name          | Unassigned               |
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**FOREIGN PATENT DOCUMENTS**


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|                     |                       | Office <sup>3</sup>     | Number    | Kind Code <sup>2</sup> (if known) |   |  |   |                |
|                     | CA                    | WO                      | 01/18013  | A1                                | Metabasis Therapeutics                          | 03-15-2001                                       |   |                |
|                     | CB                    | WO                      | 01/32153  | A2                                | Biochem Pharma                                  | 05-10-2001                                       |   |                |
|                     | CC                    | WO                      | 01/47935  | A2&3                              | Metabasis Therapeutics                          | 07-05-2001                                       |   |                |
|                     | CD                    | WO                      | 01/60315  | A2                                | Biochem Pharma                                  | 08-23-2001                                       |   |                |
|                     | CE                    | WO                      | 01/79246  | A2                                | Pharmasset                                      | 10-25-2001                                       |   |                |
|                     | CF                    | WO                      | 01/81359  | A1                                | Schering Corporation                            | 11-01-2001                                       |   |                |
|                     | CG                    | WO                      | 01/90121  | A2                                | Novirio Pharm. (Idenix)                         | 11-29-2001                                       |   |                |
|                     | CH                    | WO                      | 01/91737  | A2                                | Novirio Pharm. (Idenix)                         | 12-06-2001                                       |   |                |
|                     | CI                    | WO                      | 01/92282  | A2                                | Novirio Pharm. (Idenix)                         | 12-06-2001                                       |   |                |
|                     | CJ                    | WO                      | 01/96353  | A2                                | Novirio Pharm. (Idenix)                         | 12-20-2001                                       |   |                |
|                     | CK                    | WO                      | 02/18404  | A2                                | F. Hoffmann-La Roche                            | 03-07-2002                                       |   |                |
|                     | CL                    | WO                      | 02/32414  | A2&3                              | Schering Corporation                            | 04-25-2002                                       |   |                |
|                     | CM                    | WO                      | 02/32920  | A2                                | Pharmasset Limited                              | 04-25-2002                                       |   |                |
|                     | CN                    | WO                      | 02/48165  | A2                                | Pharmasset Limited                              | 06-20-2002                                       |   |                |
|                     | CO                    | WO                      | 02/057287 | A2                                | Merck & Co. Inc.                                | 07-25-2002                                       |   |                |
|                     | CP                    | WO                      | 02/057425 | A2                                | Merck & Co. Inc.                                | 07-25-2002                                       |   |                |
|                     | CQ                    | WO                      | 02/070533 | A2                                | Pharmasset Limited                              | 09-12-2002                                       |   |                |
|                     | CR                    | WO                      | 02/094289 | A1                                | F. Hoffmann-La Roche                            | 11-28-2002                                       |   |                |
|                     | CS                    | WO                      | 02/100415 | A2                                | F. Hoffmann-La Roche                            | 12-19-2002                                       |   |                |
|                     | CT                    | WO                      | 03/024461 | A1                                | Schering Corporation                            | 03-27-2003                                       |   |                |
|                     | CU                    | WO                      | 03/026589 | A2                                | Idenix; CNRS; U. Montp.                         | 04-03-2003                                       |   |                |
|                     | CV                    | WO                      | 03/026675 | A1                                | Idenix; CNRS; U. Montp.                         | 04-03-2003                                       |   |                |
|                     | CW                    | WO                      | 03/061385 | A1                                | Ribarpharm                                      | 07-31-2003                                       |   |                |
|                     | CX                    | WO                      | 03/062255 | A2                                | Ribarpharm                                      | 07-31-2003                                       |   |                |
|                     | CY                    | WO                      | 04/002422 | A2                                | Idenix; Univ.D.S.Cagliari                       | 01-08-2004                                       |   |                |
|                     | CZ                    | WO                      | 04/002999 | A2                                | Idenix; Univ.D.S.Cagliari                       | 01-08-2004                                       |   |                |
|                     | CAA                   | WO                      | 04/003138 | A2                                | Merck; Isis                                     | 01-08-2004                                       |   |                |
|                     | CAB                   | WO                      | 04/009020 | A2                                | Merck; Isis                                     | 01-29-2004                                       |   |                |

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| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.  | T <sup>6</sup> |
|---------------------|-----------------------|--|----------------|
|                     | DA                    | ALT, M., <i>et al.</i> , "Core specific antisense phosphorothioate oligodeoxynucleotides as potent and specific inhibitors of hepatitis C viral translation," <i>Archives of Virology</i> , 142:589-599 (1997).  |                |
|                     | DB                    | ALT, M., <i>et al.</i> , "Specific inhibition of hepatitis C viral gene expression by antisense phosphorothioate oligodeoxynucleotides," <i>Hepatology</i> , 22:707-717 (1995).  |                |
|                     | DC                    | ALTMANN <i>et al.</i> , "The synthesis of 1'-methyl carbocyclic thymidine and its effect on nucleic acid duplex stability," <i>Synlett, Thieme Verlag, Stuttgart, De</i> , 10:853-855 (1994).  |                |
|                     | DD                    | BAGINSKI, S. G., <i>et al.</i> , "Mechanism of action of a pestivirus antiviral compound," <i>PNAS USA</i> , 97(14):7981-7986 (2000).  |                |
|                     | DE                    | BATTAGLIA, A.M. <i>et al.</i> , "Combination Therapy with Interferon and Ribavirin in the Treatment of Chronic Hepatitis C Infection", <i>Ann. Pharmacother</i> , 34:487-494 (2000).   |                |
|                     | DF                    | BEIGELMAN, L.N., <i>et al.</i> , "Epimerization during the acetolysis of 3-O-acetyl-5-O-benzoyl-1,2-O-isopropylidene-3-C-methyl- $\alpha$ ,D-ribofuranose. Synthesis of 3'-C-methylnucleosides with the $\beta$ -D-ribo- and $\alpha$ -D-arabino configurations," <i>Carbohydrate Research</i> , 181:77-88 (1988). |                |
|                     | DG                    | BEIGELMAN, L.N., <i>et al.</i> , "A general method for synthesis of 3'-C-alkylnucleosides," <i>Nucleic Acids Symp. Ser.</i> , 9:115-118 (1981).  |                |
|                     | DH                    | BERENGUER, M., <i>et al.</i> , "Hepatitis B and C viruses: Molecular identification and targeted antiviral therapies," <i>Proceedings of the Association of American Physicians</i> , 110(2), 98-112 (1998).   |                |
|                     | DI                    | BERENGUER, M. <i>et al.</i> , "Hepatitis C virus in the transplant setting", <i>Antivir. Ther.</i> , 3 (Suppl 3):125-136 (1998).   |                |
|                     | DJ                    | BERMAN, E., <i>et al.</i> , "Synergistic cytotoxic effect of azidothymidine and recombinant interferon alpha on normal human bone marrow progenitor cells," <i>Blood</i> , 74(4):1281-1286 (1989)  |                |
|                     | DK                    | BHAT <i>et al.</i> (Oral Session V, Hepatitis C Virus, Flaviviridae, 2003 (Oral Session V, Hepatitis C Virus, Flaviviridae; 16 <sup>th</sup> International Conference on Antiviral Research (April 27, 2003, Savannah, Ga.); p A75).   |                |
|                     | DL                    | BROWNE, M.J., <i>et al.</i> , "2',3'-didehydro-3'-deoxythymidine (d4T) in patients with AIDS or AIDS-Related Complex: A Phase I trial," <i>J. Infect. Dis.</i> , 167(1):21-29 (1993).  |                |
|                     | DM                    | COLACINO, J. M., "Review article: Mechanisms for the anti-hepatitis B virus activity and mitochondrial toxicity of fialuridine (FIAU)," <i>Antiviral Res.</i> , 29(2-3): 125-39 (1996).  |                |
|                     | DN                    | CUI, L., <i>et al.</i> , "Cellular and molecular events leading to mitochondrial toxicity of 1-(2-deoxy-2-fluoro-1- $\beta$ -D-arabinofuranosyl)-5-iodouracil in human liver cells," <i>J. Clin. Invest.</i> , 95:555-563 (1995).  |                |
|                     | DO                    | CZERNECKI, S., <i>et al.</i> , "Synthesis of various 3'-branched 2',3'-unsaturated pyrimidine nucleosides as potential anti-HIV agents," <i>J. Org. Chem.</i> , 57:7325-7328 (1992).   |                |

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|  |   |    |    | Application Number       | 10/715,729               |
|  |   |    |    | Filing Date              | November 17, 2003        |
|  |   |    |    | First Named Inventor     | Sommadossi <i>et al.</i> |
|  |   |    |    | Group Art Unit           | Unassigned               |
|  |   |    |    | Examiner Name            | Unassigned               |
| Sheet  | 5 | of | 11 | Attorney Docket Number   | 06171.105062 IDX 1023    |

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|   | EA                    | DAVIS, G.L., "Current therapy for chronic Hepatitis C," <i>Gastroenterology</i> 118:S104-S114 (2000).   |                |
|   | EB                    | De FRANCESCO, R., <i>et al.</i> , "Approaching a new era for hepatitis C virus therapy: Inhibitors of the NS3-4A serine protease and the NS5B RNA-dependent RNA polymerase," <i>Antiviral Research</i> , 58:1-16 (2003).  |                |
|   | EC                    | De LOMBAERT, S., <i>et al.</i> , "N-Phosphonomethyl dipeptides and their phosphonate prodrugs, a new generation of neutral endopeptidase (NEP, EC 3.4.24.11) inhibitors," <i>J. Med. Chem.</i> , 37:498-511 (1994).   |                |
|   | ED                    | DORNSIFE, R. E. <i>et al.</i> , "In Vitro Potency of Inhibition by Antiviral Drugs of Hematopoietic Progenitor Colony Formation Correlates with Exposure at Hemotoxic Levels in Human Immunodeficiency Virus-Positive Humans" <i>Antimicrob. Agents Chemother.</i> 40(2):514-519 (1996)   |                |
|   | EE                    | DYMOCK, B.W., <i>et al.</i> , "Review: Novel approaches to the treatment of hepatitis C virus infection," <i>Antiviral Chemistry &amp; Chemotherapy</i> , 11(2):79-96 (2000).   |                |
|   | EF                    | ELDRUP <i>et al.</i> (Oral Session V, Hepatitis C Virus, Flaviviridae; 16 <sup>th</sup> International Conference on Antiviral Research (April 27, 2003, Savannah, Ga.).   |                |
|   | EG                    | FAIVRE-BUET, V., <i>et al.</i> , "Synthesis of 1'-deoxypsycofuranosyl-deoxynucleosides as potential anti-HIV agents," <i>Nucleosides &amp; Nucleotides</i> , 11(7):1411-1424 (1992).  |                |
|   | EH                    | FARKAS, J., <i>et al.</i> , "Nucleic acid components and their analogues. XCIV. Synthesis of 6-amino-9-(1-deoxy-β-D-psicofuranosyl)purine", <i>Collect. Czech. Chem. Commun.</i> 32:2663-2667 (1967).   |                |
|   | EI                    | FARKAS, J., <i>et al.</i> , "Nucleic acid components and their analogues. LXXIX. Synthesis of methyl 1-deoxy-D-psicofuranosides substituted at C <sub>11</sub> with halo atoms or a mercapto group," <i>Collect. Czech. Chem. Commun.</i> , 31:1535-1543 (1996).  |                |
|   | EJ                    | FARQUHAR, D., <i>et al.</i> , "Synthesis and biological evaluation of neutral derivatives of 3-fluoro-2'-deoxyuridine 5'-phosphate," <i>J. Med. Chem.</i> , 26: 1153-1158 (1983).   |                |
|   | EK                    | FARQUHAR, D., <i>et al.</i> , "Synthesis and biological evaluation of 9-[5'-(2-oxo-1,3,2-oxazaphosphorinan-2-yl)-β-D-arabinosyl]adenine and 9-[5'-(2-oxo-1,3,2-dioxazaphosphorinan-2-yl)-β-D-arabinosyl]adenine: Potential neutral precursors of 9-[β-D-arabinofuranosyl]adenine 5'-monophosphate," <i>J. Med. Chem.</i> , 28:1358-1361 (1985). |                |
|   | EL                    | FEDOROV, I.I., <i>et al.</i> , "3'-C-Branched 2'-deoxy-5-methyluridines: Synthesis, enzyme inhibition, and antiviral properties," <i>J. Med. Chem.</i> , 35(24):4567-4575 (1992).   |                |
|   | EM                    | FERRARI R., <i>et al.</i> , "Characterization of soluble hepatitis C virus RNA-dependent RNA polymerase expressed in <i>Escherichia coli</i> ," <i>Journal of Virology</i> , 73(2), 1649-1654 (1999).   |                |

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|   | FA                    | FISCHL, M.A., <i>et al.</i> , "Zalcitabine compared with zidovudine in patients with advanced HIV-1 infection who received previous zidovudine therapy," <i>Ann. Intern. Med.</i> , 18(10):762-769 (1993).  |                |
|   | FB                    | FRANCHETTI, P., <i>et al.</i> , "2'-C-Methyl analogues of selective adenosine receptor agonists: synthesis and binding studies," <i>J. Med. Chem.</i> , 41(10):1708-1715 (1998).  |                |
|   | FC                    | FREED, J.J., <i>et al.</i> , "Evidence for acyloxymethyl esters of pyrimidine 5'-deoxyribonucleotides as extracellular sources of active 5'-deoxyribonucleotides in cultured cells," <i>Biochemical Pharmacology</i> , 38:3193-3198 (1989).   |                |
|   | FD                    | GALDERISI, U., <i>et al.</i> , "Antisense oligonucleotides as therapeutic agents," <i>Journal of Cellular Physiology</i> , 181(2):251-257 (November 1999).  |                |
|   | FE                    | GROUILLER, A., <i>et al.</i> , "Novel <i>p</i> -toluenesulfonylation and thionocarbonylation of unprotected thymine nucleosides," <i>Synlett</i> , 1993, 221-222 (March 1993).  |                |
|   | FF                    | GUNIC, E., <i>et al.</i> , "Synthesis and cytotoxicity of 4'-C- and 5'-C-substituted Toyocamycins," <i>Bioorg. Med. Chem.</i> , 9:163-170 (2001).   |                |
|   | FG                    | HARAGUCHI, K., <i>et al.</i> , "Preparation and reactions of 2'- and 3'- vinyl bromides of uracil nucleosides: Versatile synthons for anti-HIV agents," <i>Tetrahedron Letters</i> , 32(28):3391-3394 (1991).   |                |
|   | FH                    | HARAGUCHI, K., <i>et al.</i> , "Stereoselective synthesis of 1'-C-branched uracil nucleosides from uridine," <i>Nucleosides &amp; Nucleotides</i> , 14(3-5):417-420 (1995).   |                |
|   | FI                    | HARRY-O'KURU, R.E., <i>et al.</i> , "A short, flexible route toward 2'-C-branched ribonucleosides," <i>J. Org. Chem.</i> , 62:1754-1759 (1997). (Scheme 11).  |                |
|   | FJ                    | HARRY-O'KURU, R.E., <i>et al.</i> , "2'-C-Alkylribonucleosides: Design, synthesis, and conformation," <i>Nucleosides &amp; Nucleotides</i> , 16(7-9):1457-1460 (1997).  |                |
|   | FK                    | HATTORI, H., <i>et al.</i> , "Nucleosides and nucleotides. 175. Structural requirements of the sugar moiety for the antitumor activities of new nucleoside antimetabolites, 1-(3-C-ethynyl-β-D-ribo-pentofuranosyl)cytosine and -uracil," <i>J. Med. Chem.</i> , 41:2892-2902 (1998).                       |                |
|   | FL                    | HOSTETLER, K.Y., <i>et al.</i> , "Synthesis and antiretroviral activity of phospholipids analogs of azidothymidine and other antiviral nucleosides," <i>J. Biol. Chem.</i> , 265:6112-6115 (1990).  |                |
|   | FM                    | HOSTETLER, K.Y., <i>et al.</i> , "Greatly enhanced inhibition of Human Immunodeficiency Virus Type I replication in CEM and HT4-6C cells by 3'-deoxythymidine diphosphate dimyristoylglycerol, a lipid prodrug of 3'-deoxythymidine," <i>Antimicrob. Agents Chemother.</i> , 36:2025-2029 (September 1992). |                |
|   | FN                    | HUNSTON, R.N., <i>et al.</i> , "Synthesis and biological properties of some cyclic phosphotriesters derived from 2'-deoxy-5-fluorouridine," <i>J. Med. Chem.</i> , 27:440-444 (1984).   |                |

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|   | GA                    | HREBABECKY, H., <i>et al.</i> , "Nucleic acid components and their analogues. CXLIX. Synthesis of pyrimidine nucleosides derived from 1-deoxy-D-psicose," <i>Collect. Czech. Chem. Commun.</i> , 37:2059-2065 (1972).   |                |
|   | GB                    | HREBABECKY, H., <i>et al.</i> , "Synthesis of 7- and 9β-D-psicofuranosylguanine and their 1'-deoxy derivatives," <i>Collect. Czech. Chem. Commun.</i> , 39:2115-2123 (1974).  |                |
|   | GC                    | IINO, T., <i>et al.</i> , "Nucleosides and nucleotides. 139. Stereoselective synthesis of (2'S)-2'-C-alkyl-2'-deoxyuridines," <i>Nucleosides and Nucleotides</i> , 15(1-3):169-181 (1996).  |                |
|   | GD                    | ITOH, Y., <i>et al.</i> , "Divergent and stereocontrolled approach to the synthesis of uracil nucleosides branched at the anomeric position," <i>J. Org. Chem.</i> , 60(3):656-662 (1995).  |                |
|   | GE                    | JOHNSON, C.R., <i>et al.</i> , "3'-C-Trifluoromethyl ribonucleosides," <i>Nucleosides &amp; Nucleotides</i> , 14(1&2):185-194 (1995).   |                |
|   | GF                    | JONES, G. H.; Moffatt, J. G., <i>Methods in Carbohydrate Chemistry</i> ; Whisler, R. L. and Moffatt, J. L. Eds; Academic Press: New York, 1972; 315-322   |                |
|   | GG                    | JONES, G. H., <i>et al.</i> , "4'-substituted nucleosides. 5. Hydroxymethylation of nucleoside 5'-aldehydes," <i>J. Org. Chem.</i> , 44:1309-1317 (1979).   |                |
|   | GH                    | KAWANA, M., <i>et al.</i> , "The deoxygenation of tosylated adenosine derivatives with Grignard reagents," <i>Nucleic Acids Symp. Ser.</i> , 17:37-40 (1986).   |                |
|   | GI                    | KHAMNEI, S., "Neighboring group catalysis in the design of nucleotide prodrugs," <i>J. Med. Chem.</i> , 39:4109-4115 (1996).  |                |
|   | GJ                    | KUCERA, L.S., <i>et al.</i> , "Novel membrane-interactive ether lipid analogs that inhibit infectious HIV-1 production and induce defective virus formation," <i>AIDS Res. Hum. Retro Viruses</i> , 6:491-501 (1990).   |                |
|   | GK                    | KURTZBERG J., <i>et al.</i> , "Differential toxicity of carbovir and AZT to human bone marrow hematopoietic progenitor cells in vitro," <i>Exp. Hematol.</i> , 18(10):1094-1096 (1990).   |                |
|   | GL                    | LAI, V.C.H., <i>et al.</i> , "Mutational analysis of bovine viral diarrhea virus RNA-dependent RNA polymerase," <i>J. Virol.</i> , 73(12):10129-10136 (December 1999).  |                |
|   | GM                    | LAFAIRE, S., <i>et al.</i> , "3'-Deoxy-3'-C-trifluoromethyl nucleosides: Synthesis and antiviral evaluation," <i>Nucleosides &amp; Nucleotides</i> , 17(12):2267-2280 (1998).   |                |
|   | GN                    | LEONARD, N. J., <i>et al.</i> , "5-Amino-5-deoxyribose derivatives. Synthesis and use in the preparation of "reversed" nucleosides" <i>J. Heterocycl. Chem.</i> , 3:485-489 (December 1966).  |                |
|   | GO                    | LERZA, R., <i>et al.</i> , "In vitro synergistic inhibition of human bone marrow hemopoietic progenitor growth by a 3'-azido-3'-deoxy-thymidine, 2',3'-dideoxycytidine combination," <i>Exp. Hematol.</i> , 25(3):252-255 (1997).                               |                |

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|  |   |    |    | First Named Inventor     | Sommadossi <i>et al.</i> |
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|   | HA                    | LEWIS W, <i>et al.</i> , "Zidovudine induces molecular, biochemical, and ultrastructural changes in rat skeletal muscle mitochondria," <i>J. Clin. Invest.</i> , 89(4):1354-1360 (1992).  |                |
|   | HB                    | LEWIS, L. D., <i>et al.</i> , "Ultrastructural changes associated with reduced mitochondrial DNA and impaired mitochondrial function in the presence of 2'3'-dideoxycytidine," <i>Antimicrob. Agents Chemother.</i> , 36(9):2061-2065 (1992).   |                |
|   | HC                    | LEWIS, W., <i>et al.</i> , "Fialuridine and its metabolites inhibit DNA polymerase $\gamma$ at sites of multiple adjacent analog incorporation, decrease mtDNA abundance, and cause mitochondrial structural defects in cultured hepatoblasts," <i>Proceedings of the National Academy of Sciences, USA</i> , 93(8): 3592-7 (1996). |                |
|   | HD                    | LEYSEN, P. <i>et al.</i> , "Perspectives for the treatment of infections with <i>Flaviviridae</i> ," <i>Clinical Microbiology Reviews</i> (Washington, D.C.), 13(1):67-82 (January 2000).   |                |
|   | HE                    | LOHMANN V., <i>et al.</i> , "Biochemical and kinetic analyses of NS5B RNA-dependent RNA polymerase of the Hepatitis C virus," <i>Virology</i> , 249, 108-118 (1998).  |                |
|   | HF                    | LOHMANN, V., <i>et al.</i> , "Replication of subgenomic hepatitis C virus RNAs in a hepatoma cell line," <i>Science</i> , 285(5424):110-113 (July 2, 1999).   |                |
|   | HG                    | LUH, T.-Y., <i>et al.</i> , "A convenient method for the selective esterification of amino-alcohols," <i>Synthetic Communications</i> , 8(5):327-333 (1978).  |                |
|   | HH                    | MARTIN, J.A., <i>et al.</i> , "Synthesis and antiviral activity of monofluoro and difluoro analogues of pyrimidine deoxyribonucleosides against human immunodeficiency virus (HIV-1)," <i>J. Med. Chem.</i> , 33(8):2137-2145 (1990).   |                |
|   | HI                    | MARTIN, X., <i>et al.</i> , "Intramolecular hydrogen bonding in primary hydroxyl of thymine 1-(1-deoxy- $\beta$ -D-psicofuranosyl) nucleoside," <i>Tetrahedron</i> , 50(22):6689-6694 (1994).   |                |
|   | HJ                    | MATSUDA, A., <i>et al.</i> , "Radical deoxygenation of <i>tert</i> -alcohols in 2'-branched-chain sugar pyrimidine nucleosides: Synthesis and antileukemic activity of 2'-deoxy-2'-(S)-methylcytidine," <i>Chem. Pharm. Bull.</i> , 35(9):3967-3970 (1987).   |                |
|   | HK                    | MATSUDA, A., <i>et al.</i> , "Alkyl addition reaction of pyrimidine 2'-ketonucleosides: Synthesis of 2'-branched-chain sugar pyrimidine nucleosides (Nucleosides and Nucleotides. LXXXI)," <i>Chem. Pharm. Bull.</i> , 36(3):945-953 (1988).  |                |
|   | HL                    | MATSUDA, A., <i>et al.</i> , "Nucleosides and Nucleotides. 94. Radical deoxygenation of <i>tert</i> -alcohols in 1-(2-C-alkylpentofuranosyl)pyrimidines: Synthesis of (2'S)-2'-deoxy-2'-C-methylcytidine, an antileukemic nucleoside," <i>J. Med. Chem.</i> , 34:234-239 (1991).  |                |
|   | HM                    | MATSUDA, A., <i>et al.</i> , "Nucleosides and Nucleotides. 104. Radical and palladium-catalyzed deoxygenation of the allylic alcohol systems in the sugar moiety of pyrimidine nucleosides," <i>Nucleosides &amp; Nucleotides</i> , 11(2/4):197-226 (1992).   |                |

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Sheet **9** of **11****Complete if Known**

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| Examiner Name          | Unassigned               |
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|---------------------|-----------------------|---|----------------|
|                     | IA                    | McCORMICK, J., <i>et al.</i> , "Structure and total synthesis of HF-7, a neuroactive glyconucleoside disulfate from the funnel-web spider <i>Hololena curta</i> ," <i>J. Am. Chem. Soc.</i> , 121(24), 5661-5665 (1999).  |                |
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|   |    |    |    | Application Number       | 10/715,729               |
|   |    |    |    | Filing Date              | November 17, 2003        |
|   |    |    |    | First Named Inventor     | Sommadossi <i>et al.</i> |
|   |    |    |    | Group Art Unit           | Unassigned               |
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|   | JA                    | PAN-ZHOU, X-R, <i>et al.</i> , "Differential effects of antiretroviral nucleoside analogs on mitochondrial function in HepG2 cells," <i>Antimicrob. Agents Chemother.</i> , 44:496-503 (2000).   |                |
|   | JB                    | PIANTADOSI, C., <i>et al.</i> , "Synthesis and evaluation of novel ether lipid nucleoside conjugates for anti-HIV-1 activity," <i>J. Med. Chem.</i> 34:1408-1414 (1991).   |                |
|   | JC                    | RICHMAN, D.D., <i>et al.</i> , "The toxicity of azidothymidine (AZT) in the treatment of patients with AIDS and AIDS-Related Complex," <i>N. Engl. J. Med.</i> , 317(4):192-197 (1987).  |                |
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